

# Lincoln MPO Public Works and Utilities Department

2005 ANNUAL REVIEW

Date:

April 14, 2005

To:

David Cary, Planning Department

From:

Mike Brienzo, Transportation Planning

Subject:

2005 Annual Review of Comprehensive Plan

Copies To:

Ann Harrell, Roger Figard, Karl Fredrickson, Randy Hoskins, Virendra Singh, Don Thomas, Doug Pillard, Marvin Krout.

Amendment 05004 - County Future Road Improvement for Potential Paving of S. 82nd Street, Hickman Road to Panama Road.

This amendment proposal by the Lancaster County Board of Commissioners (3/8/05) is to identify South 82nd Street, Hickman Road to Panama Road, for "Potential Paving" in the County element of the Transportation Plan which will allow the County Engineer to prioritize and program this road for paving when needed. The designation of "Potential Paving" for a rural road in the Transportation Plan allows the County Engineer to prioritize and program facilities to meet the goals and objectives of county residents in providing a safe and efficient roadway network for Lancaster County residents.

This potential roadway improvement appears to sufficiently meet the threshold criteria for including this road in the County Element of the Transportation Plan. The stated purpose is to serve a growing community of the Village of Hickman and the surrounding area which fits into the general scope of the Hickman Comprehensive Plan. Road improvements are also expected to be necessary to aid the traveling public when S. 82nd Street will be used as the detour route during the closure of S. 68th Street and construction of the S. 68th Street viaduct.

From a systems planning perspective, the primary short coming of this amendment is that it does not address the two mile segment of S. 82nd Street from Roca Road to Hickman Road. Staff recommendation is that this segment be considered for inclusion in the County Element of the Transportation Plan at the next opportunity.

Public Works and Utilities Department and the MPO Staff are in support of the Lancaster County Board request to amend the County element of the Transportation Plan.



# Lincoln MPO Public Works and Utilities Department

2005 ANNUAL REVIEW

MAR - 4 2005

Date: Ma

March 3, 2005

To: Steve Henrichsen, Planning Department

From: Mike Brienzo, Transportation Planning

Subject: 2005 Annual Review of Comprehensive Plan

Copies To: Roger Figard, Karl Fredrickson, Randy Hoskins,

Virendra Singh, Dennis Bartels, Scott Cockrill, Roger Ohlrich,

Kelly Sieckmeyer

Listed below are the general comments from Public Works: Long Range Transportation Planning addressing the proposed 2005 Comprehensive Plan Amendments. If you have questions or if staff can assist with more detailed transportation system evaluations, let me know.

Amendment 05003 - Trail Network Plan relocating of this trail corridor from the Dead Man's Run corridor to run along Huntington/Leighton Avenue between 33rd and 48th Street.

The relocating of this trail corridor from the Dead Man's Run corridor to run along Huntington/Leighton Avenue between 33rd and 48th Street is a positive adjustment to the Trail Plan. This takes advantage of a trail easement along the south side of Huntington/Leighton provided by the University of Nebraska and routes the trail around the UNL East Campus. This alignment will also allow the trail to be constructed sooner and take advantage of the traffic signal at the intersection of 48th Street and Leighton Avenue. Public Works and Utilities Department is in support of this trail map amendment.

Amendment 05004 - County Future Road Improvement for Potential Paving of S. 82nd Street, Hickman Road to Panama Road.

This will identify S. 82nd Street, Hickman Road to Panama Road, for Potential Paving in the County element of the Transportation Plan and allow the County Engineer to pave this gravel road when needed. Paving is expected to be necessary to aid the traveling public as S. 82nd Street will be used as the detour route during the closure of S. 68th Street for the construction of the S. 68th Street viaduct. Public Works and Utilities Department is in support of the County request to amendment the Transportation Plan.

Amendment 05005 - Amend the Transportation Plan to show Fletcher Avenue, 14th to 27th Street, to 1)change the road from a 4 lane to a 2+CTL facility and 2) downgrade the functional classification from a Minor Arterial to Urban Collector.

Fletcher Avenue, 14th Street to 27th Street, serves a large and growing commercial area to the north which in expected to include Commercial Retail of 483,400 sf, Office at 118,400 sf and Service Employment at 533,000 sf. There is also a growing residential area to the south of this facility which is to include approximately 700 dwelling units and a 550 Student school site. Projected traffic for the Fletcher Avenue corridor is approximately 20,000 vehicles per day and will require a 4 lane facility. This transportation facility needs to be evaluated in relation to the transportation needs of the entire area it serves. Fletcher Avenue as a section line road with an arterial designation that will take the pressure off the 14th and 27th Street corridors and off of Superior Street. Traffic projections for these roadways are expected to meet or exceed its current capacity within the planning period. If Fletcher Avenue is restricted in capacity and its future functional classification is downgraded from arterial to collector, it would simply push additional traffic onto adjacent streets increasing the traffic impacts within the neighborhoods. Public Works and Utilities Department does not support this amendment.

Amendment 05006 - North 1st Street to 14th Street Road changes future functional classification, Right-of-Way, and roadway system design for 7th Street, Humphrey, Pennsylvania and Fletcher Avenue between N. 1st and 14th along with an Urban Growth Tier change from Tier I - Priority B to Priority A.

Future Functional Classification: The proposal to add collector street status to Humphrey and Pennsylvania and to 7th Street is generally acceptable. This will serve the travel patterns in this area which are primarily east-west and feed traffic onto N. 1st Street and N. 14th Street. The 7th Street corridor from Fletcher Avenue to Alvo Road will serve as a north-south collector within this developing area. The adding of Fletcher Avenue as a collector street is not recommended due to the close proximity of US-34 at its intersection with N 1st Street on the west, and due to the close proximity of the I-80 bridge at its intersection with N. 14th Street on the east.

**Right-of-Way Needs:** The 120 foot right-of-way corridor shown in the current Transportation Plan may be adjusted but sufficient right-of-way may need to be provided for both Humphrey and Pennsylvania Avenue to serve this area in the future. A recommended minimum right-of-way corridor is identified below according to each options.

The addition of a hiker/biker trail as shown in the Transportation Plan will require additional right-of-way or easements. Trail right-of-way requirements are an additional 6 feet added to the right-of-way. If a trail easement separate from the roadway right-of-way is desired, an easement of 20 feet is a common width.

Roadway System Design: There are two options under consideration to complete these roadway connections. These concepts address the projected 2025 traffic which is over 18,000

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vehicles per day. This is at the high end for a single collector street and falls in line with the ITE Technical Council recommendation for two collector streets that are located within 80 foot corridors (this includes pedestrian facilities). Either option is acceptable to Public Works and Utilities Department with a preference for Option 1 (single "Diagonal Roadway"). The Comprehensive Plan, city ordinances and design standards will permit either option.

Option 1 – This is the Humphrey and Pennsylvania "Diagonal Roadway Option" connecting the intersection of N. 1st Street/Fallbrook Blvd/Pennsylvania with N. 14th Street/Humphrey Avenue intersection. This bends the Humphrey and Pennsylvania Avenue into a single urban collector with the diagonal connection to the east of 7th Street. The Comprehensive Plan will need to be amended to show a diagonal roadway alignment and to delete Humphrey as a collector.

This design concept is for a 2 lane boulevard with 18 feet of pavement (back of curb to back of curb) on either side of 16 foot median; paved turn lanes in the median in the same fashion as approved for Wilderness Hill Blvd. This would be in an 84 feet of right-of-way and parallel parking would be allowed on both sides of the boulevard from N. 1st Street and N. 14th Street. Driveway access and lots facing the street would be permitted, but limited and corner lots should take access from local street. The design is for a posted speed of 30 mph as for collectors would be used as per design standards.

<u>Option 2</u> – This is a dual collector system with a pair of 2+CTL designed streets for Humphrey and Pennsylvania from N. 1st Street to N. 14th Street. This concept is in the current Comprehensive Plan for both Humphrey and Pennsylvania Avenue.

Under this option, both streets would be built to 2+CTL standards with 33 feet of pavement width (face of curb to face of curb) within a 72 foot right-of-way as per the Subdivision Ordinance for collectors. No parking would be allowed on either side of the street. If parking is needed, then 80 feet of right-of-way will be required. Driveway access and lots facing the street would be permitted, but limited and corner lots should take access from local streets. The design is for a posted speed of 30 mph as for collectors would be used as per design standards.

**Pedestrian/Bicycle Trail:** The Comprehensive Plan shows a bike trail along Humphrey Avenue that needs to be accommodated either within the selected option or moved to an adjacent corridor. To have the trail along Humphrey or Pennsylvania would require limiting the number of driveways and would require an additional 6 feet of right-of-way for a trail as shown in Comprehensive Plan. This will provide adequate right-of-way for a 10 foot trail.

Capital Improvements: The urban street infrastructure is not in place and City funds are have not been identified at this time that would support these Capital Improvement projects. Changing the Priority "B" area to Priority "A" suggests Humphrey Avenue, Pennsylvania

Avenue and 7th Street are next in line for urban street improvements. This assumption can not be supported under the current funding program and development within this area will need to be the responsibility of neighboring land owners or would be built with developer funding.

**Recommendation:** Public Works and Utilities Department is generally in support of the amendment to the Transportation Plan, as defined above, with the understanding that the future right-of-way needs are met. Fletcher Avenue classification is not recommended to become a collector street. Either of these options are acceptable with the Public Works preference for Option 1 with the future pedestrian and trail alignment identified. This support does not imply available roadway funding at this time and roadway improvements will need to be the responsibility of the developer.

#### Amendment 05007 - NW 70th & West Superior proposed change from Priority B to A.

This area is currently identified as Tier I priority B with a request to change it to priority A. Adjacent roadway sections today are rural, NW 70th Street, West Adams to West Superior, and West Superior, NW 70th to NW 56th Street. The County Engineer is currently engineering and grading both NW 70th Street and West Superior to improve the roads with a gravel surface and a 2+1 wide driving top. The city is currently working on the designs for upgrading West Adams and NW 56th Streets but does not have these roadway improvements identified in the Capital Improvement Program.

The changing of this area from Priority "B" to Priority "A" suggests the City is ready to accept urban development activities that may require urban street improvements right away. Roadway improvements can not be supported under the current funding program and development within this area will need to be the responsibility of neighboring land owners or built with developer funding. Public Works and Utilities Department is not supporting this amendment due to the insufficient urban roadway facilities within this area and the lack of available roadway funding at this time to provide these facilities.

#### Amendment 05008 - Southwest Area proposed change 303 acres from Priority B to A.

This area is for 303 acres well into the Tier I Priority B area without a developed urban transportation network and will potentially open up a total of 1,004 acres for development. The necessary roadway improvements needed to support this level of development are shown in the Transportation Plan but none of the necessary funding has been identified in the Capital Improvement Program. Available funds are not expected in the near future. The developer will need to provide the designs and construct the necessary roadway system as identified in the Transportation Plan (page F105 of the Comprehensive Plan). Consideration for collector type streets connecting Coddington Avenue with SW 12th Street is within the development will need to be considered early in the planning process.

Public Works and Utilities Department does not support this amendment because changing this

area to Tier I suggests the City is ready to accept urban development activities that may require extensive urban street improvements. This assumption can not be supported under the current funding program and development within the Southwest Area and improvements will need to be the responsibility of neighboring land owners and the developer. Public Works and Utilities Department would like this proposal incorporated into the Southwest Subarea Land Use and Transportation Study that is identified in the Transportation Plan before changing its priority.

### Amendment 05009 - N. 56th St & I-80 Industrial change from Agricultural to Industrial and Commercial and include in 2005 Future Service Limit on northwest corner.

This 208 acre site currently in Tier II and not adjacent to existing county or urban roadways or planned roadways. Since this development does not extend north to Bluff Road, the only major roadway access available is onto US-77 and commercial access to US-77 will require NDOR approval.

This is an area outside the current Tier I planning area and has not been analyzed within the context of the current Land Use and Transportation Plan. Since the details of this proposal are not known and since this site does not directly border any city or county streets and roads, the general system impacts are unknown. Additional information and State review may be needed prior to acceptance.

### Amendment 05010 - South 40th & Rokeby Road to specifically designate a Community commercial center at this intersection.

This area appears to be in Tier I Priority A. The properties along South 40th & Rokeby Road will need to dedicate right-of-way to comply with the 120 feet required to meet future roadway right-of-way needs. Funding is not in place to support future roadway improvements.

Note that the Lincoln Electric System (LES) Plan shows twin 115 kV transmission power lines extending south along 40th Street and a 115 kV Substation in the area of 40th and Rokeby Road. These are large pole facilities are usually placed outside of the roadway right-of-way within utility easements.

Public Works and Utilities Department does not have any direct issues with this amendment but is noting; 1) the need for right-of-way dedication along South 40th Street and Rokeby Road, and 2) the need for a Lincoln Electric System (LES) review to identify power line easements.

## Amendment 05011 - North 84th Street and Havelock Avenue, change from Public and Semi Public to Commercial on northeast corner of the Lancaster County Events Center site.

This is a proposed 14.4 acre commercial development in a Tier I priority A area located on the corner of a major/major intersection. This development is locked in by Murdock Trail to the south and Stevens Creek to the east and the only ingress/egress are Havelock Avenue and 84th

Street. Traffic demands may require system improvements at North 84th & Havelock and along Havelock Avenue that may include the first/second/third Events Center entrances. A traffic signal will likely be required at the intersection of 84th & Havelock. Public Works and Utilities staff is not in complete agreement with Attachment "C" as submitted which shows high traffic demands at the 84th Street driveway intersection. Traffic demands at the North 84th & Lancaster County Events Center driveway entrance may create ingress/egress issues but a traffic signal at this location is not supported by Public Works and Utilities Department.

North 84th Street is shown in Transportation Plan as requiring 140 feet of right-of-way and Havelock Avenue as requiring 120 feet right-of-way. This area is currently identified in the CIP as an enhancement study area but neither Havelock Avenue nor 84th Street are identified for roadway improvements in the current Lincoln CIP or the County Road & Bridge Construction Program.

It should be noted that only the southern portion of the Lancaster County Events Center is within the City of Lincoln and the proposed 14.4 acre commercial development is not. The intersection of 84th Street & Havelock Avenue is in located within Lincoln City limits and therefor the responsibility of the City. Havelock Avenue to the east of 84th Street remains the responsibility of the County Engineer until annexed.

Public Works and Utilities Department does not have any direct problems with this amendment but does have concern with intensifying land uses that may effect the transportation system. Public Works is requesting; 1) the right-of-way needs shown in the Transportation Plan be met, 2) an acceptable system impact study be provided, and 3) the development accept responsibility for any City Street or County Road improvements.

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